



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

646.3210

Job Sheet 170453



Part No: 646.3210

Job Qty: 12 ea

Part Name: Support



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/16/18

Job Tracking No:

Due Date: 2/8/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG REV n/c IPP REV:A NEW ISSUE 12-11-09 JLM VERIFIED BY:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	12 Ea		1/30/18	0.00	0.00	Start Up Machining-1		Kt 18-02-26
100	Bandsaw	12 pcs		1/30/18	0.00	0.43	Bandsaw1		Kt 18-02-26
110	CNC Vertical Machining	12 pcs		2/1/18	0.32	26.03	HAAS1-1		Kt 18-02-26
130	QC	12 pcs		2/1/18	0.00	0.00	QC8 Machining-1		mk 18/02/27
140	Outsource	12 pcs		2/8/18			ATG001-VC Outsource 54		At 18/03/14
150	Packaging	12 pcs		2/8/18	0.00	0.00	Packaging2		ADAS 18/03/14
155	QC	12 pcs		2/8/18	0.00	0.00	205-206		11 MAR 20 2018
180	Packaging	12 pcs		2/8/18	0.00	0.00	Packaging3-1 CCE020		9-89 MAR 20 2018
190	QC21-SA	12 Ea		2/8/18	0.00	0.00	QC21		9-89 MAR 20 2018

Part Op 100 - Cut Blank at 10.35"

Descriptions: 110 - 1-Machine per folio FB146

140 - Issue P/O to ATG : 039182 1- Hard Anodize Color Black and Prime as per Dwg 646.3200

180 - ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***

Job Allocations

M4075 TG 56.000 x 1.000

Job Allocations could not be found.

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Support	5.813Inches $\pm$ 0.005	5.818 5.808		
2	Support	0.250Inches $\pm$ 0.005	0.255 0.245	Radius	
3	Support	0.313Inches $\pm$ 0.005	0.318 0.308	Radius	
4	Support	0.110Inches $\pm$ 0.005	0.115 0.105		
5	Support	0.875Inches $\pm$ 0.005	0.880 0.870		
6	Support	0.125Inches $\pm$ 0.005	0.130 0.120		
7	Support	0.063Inches $\pm$ 0.005	0.068 0.058		
8	Support	0.825Inches $\pm$ 0.005	0.830		

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																				
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Date : _____	Step #: _____	INTY Effective : _____		MRB (QSI042) Approval ☐																																																				
Description Work Order Deviation Container No: S045159 Part: 646.3210 Job No: 170458 Serial No/Batch: S045159 Revision: 646.3200 Inspector: _____ Inspector: _____																																																								
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4" style="text-align: left; padding: 5px;">Root Cause</th> </tr> <tr> <td style="width:15%; text-align: center;">Environment ☐</td> <td style="width:15%; text-align: center;">No Re-verification ☐</td> <td style="width:30%; text-align: center;">Pressure/Forced ☐</td> <td style="width:40%;"></td> </tr> <tr> <td style="text-align: center;">Design ☐</td> <td style="text-align: center;">Operator ☐</td> <td style="text-align: center;">Bending ☐</td> <td></td> </tr> <tr> <td style="text-align: center;">Doc/Data ☐</td> <td style="text-align: center;">Offset/Setup ☐</td> <td style="text-align: center;">Centre Not Concent ☐</td> <td></td> </tr> <tr> <td style="text-align: center;">Equip/Tooling ☐</td> <td style="text-align: center;">Supplier ☐</td> <td style="text-align: center;">Cracks ☐</td> <td></td> </tr> <tr> <td style="text-align: center;">Handling/Pre ☐</td> <td style="text-align: center;">Training ☐</td> <td style="text-align: center;">Crimp/Kink/Ripple/Wave ☐</td> <td style="text-align: center;">Inspection Incomplete/Unqualified ☐</td> </tr> <tr> <td style="text-align: center;">Material ☐</td> <td style="text-align: center;">Use for Testing ☐</td> <td style="text-align: center;">Cuffs ☐</td> <td style="text-align: center;">Contamination ☐</td> </tr> <tr> <td style="text-align: center;">Internal Transport ☐</td> <td style="text-align: center;">Poor Information ☐</td> <td style="text-align: center;">Crushing ☐</td> <td style="text-align: center;">Countersink ☐</td> </tr> <tr> <td style="text-align: center;">Tribal Knowledge ☐</td> <td style="text-align: center;">Rushing ☐</td> <td style="text-align: center;">Heat Treat ☐</td> <td style="text-align: center;">Cut Too Short ☐</td> </tr> <tr> <td style="text-align: center;">LOA ☐</td> <td style="text-align: center;">Product Improvement ☐</td> <td style="text-align: center;">Wave/Twist in Tube ☐</td> <td style="text-align: center;">Instructions Incomplete/Unclear ☐</td> </tr> <tr> <td style="text-align: center;">Substation ☐</td> <td style="text-align: center;">Process Improvement ☐</td> <td style="text-align: center;">Marks/Chatter ☐</td> <td style="text-align: center;">Drill Holes ☐</td> </tr> <tr> <td style="text-align: center;">Past Expiry Date ☐</td> <td style="text-align: center;">Manufacturing Process ☐</td> <td colspan="2"></td> </tr> <tr> <td style="text-align: center;">Misidentified ☐</td> <td style="text-align: center;">Past Due ☐</td> <td colspan="2" style="text-align: center;">OTHER : _____</td> </tr> </table>					Root Cause				Environment ☐	No Re-verification ☐	Pressure/Forced ☐		Design ☐	Operator ☐	Bending ☐		Doc/Data ☐	Offset/Setup ☐	Centre Not Concent ☐		Equip/Tooling ☐	Supplier ☐	Cracks ☐		Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Past Expiry Date ☐	Manufacturing Process ☐			Misidentified ☐	Past Due ☐	OTHER : _____	
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			0.820	
9	Support	3.526Inches ± 0.005	3.531 3.521	
10	Support	2.465Inches ± 0.005	2.470 2.460	
11	Support	4.728Inches ± 0.005	4.733 4.723	
12	Support	0.094Inches $+ 0.004$ $- 0.001$	0.098 0.093	
13	Support	0.100Inches ± 0.005	0.105 0.095	
14	Support	0.125Inches ± 0.005	0.130 0.120	Radius

Plex 1/16/18 1:29 PM dart.lacelle.linda

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO039182

Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO039182

PO Date: 3/2/18

Due Date: 3/16/18

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

E-MAILED
MAR 14 2018

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	170833	D5501-3	Body, Lower Cutter, Short Issue P/O to ATG: _____ HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2 PRIME AS PER IAW MIL- P-23377J TYPE 1 CLASS N ***1-2 MIL MAX AS PER QSI005*** As Per Dwg D5501 Rev. A7 Certification of Conformity is required	Firmed	3/26/18	6 pcs	0 pcs	6 pcs	\$16.33/pcs	\$97.98
2	170453	646.3210	Support Issue P/O to ATG : _____ 1- Hard Anodize Color Black and Prime as per Dwg 646.3200	Firmed	3/26/18	12 pcs	0 pcs	12 pcs	\$15.18/pcs	\$182.16
3	171981	646.3312	Center Plate Issue P/O to ATG : _____ Hard Anodize Color Black, Prime as per Dwg 646.3300 Rev. N/C	Firmed	3/26/18	20 pcs	0 pcs	20 pcs	\$12.88/pcs	\$257.60
4	170464	646.3610	Filler Issue P/O to ATG : _____ 1- Hard Anodize Black and Prime as per Dwg 646.3600	Firmed	3/26/18	12 pcs	0 pcs	12 pcs	\$7.43/pcs	\$89.16
5	170466	646.3711	Clip Issue P/O to ATG : _____ Hard Black Anodize and Prime as per Dwg 646.3700 Rev. A	Firmed	3/26/18	21 pcs	0 pcs	21 pcs	\$6.93/pcs	\$145.53
6	170467	646.3712	Clip Issue P/O to ATG : _____ Hard Anodize, Color Black and Prime as Per Dwg 646.3712 Rev. A	Firmed	3/26/18	19 pcs	0 pcs	19 pcs	\$6.93/pcs	\$131.67
7	170468	646.3713	Gusset Issue P/O to ATG : _____ Hard Anodize, Color Black and Prime as per Dwg 646.3700	Firmed	3/26/18	21 pcs	0 pcs	21 pcs	\$16.58/pcs	\$348.18

DAS
11
9-89

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A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 914744

Date: 09-Mar-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Diane Baker
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
9 ea	Part: 647.7911 Bracket Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22641	Rev: N/C	PO: PO039182 Line: 11
12 ea	Part: 646.3210 Support Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22632	Rev: NC	PO: PO039182 Line: 2
20 ea	Part: 646.3312 Center Plate Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22633	Rev: A	PO: PO039182 Line: 3
12 ea	Part: 646.3610 Filler Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22634	Rev: N/C	PO: PO039182 Line: 4
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>9/3/18</u>			
Made in Canada.			

